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(54) Title: NUCLEIC ACID BINDING PROTEINS

(57) Abstract

The invention provides a method for producing a zinc finger polypeptide which binds to a target nucleic acid sequence containing a modified base but not to an identical sequence containing an equivalent unmodified base.

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INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER
1PC 6 C12N15/12 C12N15/10 C07K14/47 C12N9/22C12N15/62 C1201/68C12Q1/48According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system tollowed by classification symbols) C12N C07K C12Q IPC 6 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages 1-3.Y. CHOO: "Recognition of DNA methylation P,X 5-17, 19, by zinc fingers' 21,22, NATURE STRUCTURAL BIOLOGY. vol. 5, no. 4, April 1998 (1998-04), pages 25-27 264-265, XP002116419 WASHINGTON, DC, US; the whole document 1-27 M ISALAN ET AL: "Synergy between adjacent Α zinc fingers in sequence-specific DNA recognistion" PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF USA, no. 94, 27 May 1997 (1997-05-27), page 5617 5621 XP002075337 ISSN: 0027-8424 the whole document -/--Patent family members are listed in annex. Further documents are listed in the continuation of box C. X Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docucitation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled other means in the art. document published prior to the international filing date but later than the priority date claimed *&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 12/10/1999 24 September 1999 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl. Fax: (+31-70) 340-3016 Hornig, H

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